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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/520,461 | 01/07/2005 | Takahiro Kishioka | 122364 | 5518 |
| 25944 7590 10/04/2007 OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | EXAMINER | |
| | | | WALKE, AMANDA C | |
| ALEXANDRIA | A, VA 22320 | · | ART UNIT | PAPER NUMBER |
| | | | 1752 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 10/04/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|---|--|--|--|--|
| | 10/520,461 | KISHIOKA ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| • | Amanda C. Walke | 1752 | | | |
| The MAILING DATE of this communication app | ears on the cover sheet with the c | correspondence address | | | |
| Period for Reply | · · · · · · · · · · · · · · · · · · · | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. (D. (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 04 Se | eptember 2007. | | | | |
| 2a) This action is FINAL . 2b) ⊠ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>1,4-8,10 and 11</u> is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1,4-8,10 and 11</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examine | r. | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of: | priority under 35 U.S.C. § 119(a |)-(d) or (f). | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the prior | rity documents have been receive | ed in this National Stage | | | |
| application from the International Bureau | • | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
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| | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail D | / (PTO-413) Pate | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal F 6) Other: | | | | |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/6/2007 has been entered.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 4-8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kang et al (6,468,718) in view of Mizutani et al (2003/0198894) or Bonk et al (4,731,273 or 4,751,269).

Kang et al disclose an anti-reflective layer to be coated onto a substrate prior to the coating of a layer of photoresist, wherein the ARC layer comprises a polymer having an anthracene substituent, may have a triazine initiator (see examples 1-5), and comprises any known crosslinker such as a melamine compound (column 10, lines 4-21), however, the reference fails to teach the instantly claimed compound. The method of the reference meets the instant claim limitations as described in column 10, lines 31-coulmn 11, line 15.

Mizutani disclose a resist composition comprising a crosslinking compound. The known melamine crosslinkers described by the reference include a compound meeting the instant claim limitations (see page 5, formula 4).

The Bonk et al references teach adhesive resins having known crosslinker compounds such as tetrabutoxymethyl urea which is described on page 8 of the instant specification as a preferred compound of formula 1.

It would have been obvious to one of ordinary skill in the art to prepare the material of the Kang et al reference choosing the known melamine crosslinker taught by Mizutani et al or the crosslinker of either Bonk et al reference as the melamine crosslinker.

Response to Arguments

4. Applicant's arguments filed 9/4/2007 have been fully considered but they are not persuasive. Applicant has again argued that the materials of the reference fail to teach a composition wherein the condensation product or resin produced has a content of 50% mass or more in solid content. The materials of the references do teach that the crosslinking agent is present in the composition from 3-70%, preferably 5-50 % of the total solid content of the resist composition, which meets the instant claim limitations (see [0276] of Mizutani). Therefore the rejection is maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda C. Walke whose telephone number is 571-272-1337. The examiner can normally be reached on M-R 5:30-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amanda C Walke Primary Examiner Art Unit 1752

ACW September 28, 2007